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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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Federal Communications Commission
Office of Secretary

In the Matter of)
)
Amendment of the Commission's)
Rules to Establish Part 27,)
the Wireless Communications)
Service ("WCS"))

GN Docket No. 96-228

To: The Commission

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COMMENTS

AIRTOUCH COMMUNICATIONS, INC.

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COMMENTS OF AIRTOUCH COMMUNICATIONS, INC.

AirTouch Communications, Inc. ("AirTouch"), by its attorneys, hereby submits comments in response to the Commission's *Notice of Proposed Rule Making*, FCC 96-441 (Nov. 12, 1996) ("*NPRM*"), *summarized*, 61 Fed. Reg. 59048 (Nov. 20, 1996) in this docket.

BACKGROUND AND SUMMARY

On September 30, 1996, Congress passed the Omnibus Consolidated Appropriations Act, 1997 ("Appropriations Act"),¹ which requires the Commission to reallocate the frequencies at 2305-2320 and 2345-2360 MHz to wireless services that are consistent with international agreements concerning spectrum allocations. Pursuant to the Appropriations Act, the Commission must assign these reallocated frequencies by competitive bidding.² The competitive bidding mechanism utilized by the Commission to assign the frequencies must promote the most effective use of the spectrum and take into account the needs of public safety radio services.³

¹ P.L. 104-208, 110 Stat. 3009 (1996).

² Appropriations Act, § 3001.

³ Appropriations Act, § 3001(b).

In developing its licensing mechanism for WCS, the Commission seeks comment on a number of issues, including (i) the amount of spectrum that should be assigned pursuant to a WCS license, and (ii) the service area associated with such a license.⁴ The Commission indicates that it will not entertain proposals which would require the auctioning of more than 306 WCS licenses because of the statutory requirement that these licenses be awarded on an expedited basis.⁵

AirTouch urges the Commission to follow an efficient spectrum management policy, rather than the unbridled service flexibility proposed in this docket. The FCC should limit the services that can be offered in a single band or channel block in order to promote effective use of the allocation. At a minimum, the FCC should adopt WCS regulations that address the technical problems associated with operating different systems on the same spectrum in adjacent markets or on adjacent channels.

Moreover, to encourage participation by a wide variety of bidders and facilitate the development of new and niche services, AirTouch urges the Commission to award WCS licenses in 5 MHz blocks on an MTA basis. The Commission should allocate one or two of these 5 MHz blocks for use by public safety licensees. Finally, consistent with Section 309(j) of the Communications Act and regulatory parity principles, build-out requirements should be adopted and nationwide licensing rejected.

I. THE COMMISSION SHOULD ENGAGE IN AN EFFICIENT SPECTRUM MANAGEMENT PLAN

The Commission proposes to allow WCS licensees to provide any service or mix of services permitted under international allocations for Region 2 in the WCS band. Although AirTouch

⁴ *NPRM* at ¶ 10.

⁵ *NPRM* at ¶ 13 & n.27.

generally supports flexible spectrum use, complete flexibility will not always result in the most efficient or best use of spectrum. Indeed, it can potentially restrict competition, delay the provision of services, discourage innovation and necessary investment, as well as undermine spectrum auction valuation. Complete service flexibility would undermine the mission of the FCC: to create an efficient wire and radio communications network.⁶

Congress required the Commission to auction the WCS spectrum and, pursuant to its auction authority, the Commission must ensure “the efficient and intensive” use of the spectrum.⁷ The only way to ensure such use is to follow an effective spectrum management plan that accounts for the different spectrum needs and service components associated with different services. Real-time voice communications, for example, entail several important service components: high reliability and quality; coverage and capacity; privacy and control; and public safety. The Commission generally has found that such communications require an exclusive spectrum assignment. When spectrum was reallocated for Broadband PCS use, the FCC determined that fixed point-to-point microwave operations were incompatible with the mobile applications likely to be associated with PCS systems. The Commission then created a mechanism for clearing the incumbent microwave licensees from the 2 GHz spectrum. Here, the Commission should divide the WCS spectrum into bands and assign an exclusive use to each band.

Under the proposed regulatory scheme, the Commission has failed to consider the many problems associated with having incompatible uses over the same spectrum. For example, adjacent licensees will not be able to develop efficient spectrum utilization plans because they will never be

⁶ See 47 U.S.C. § 151.

⁷ 47 U.S.C. § 309(j)(3)(D).

sure what types of services the adjacent licensee is providing. Licensees may be required to set aside spectrum as “guardbands” to ensure that their systems do not interfere with adjacent systems or co-channel licensees.⁸ At a minimum, the lack of standardization and service parameters under the proposed regulatory scheme will make coordination between adjacent markets more costly and complex.

Moreover, “full flexibility” will slow, and possibly prevent, the delivery of services to the public. If licensees can provide fixed, mobile, broadcasting-satellite, radiolocation, or a mix of such services over WCS spectrum, manufacturers are unlikely to develop products for use on these frequencies until licenses are awarded and licensees announce their planned uses for spectrum. A manufacturer will not invest millions in developing a handset for two-way voice communication over 2.3 GHz because there is no guarantee that there will be a market for the equipment. The development of new, innovative equipment is useless if it is not compatible with the technologies used by various licensees. At a minimum, the proposed regulatory scheme likely will increase the cost of equipment, including CPE, because equipment will have to be designed not to interfere with numerous service offerings provided over the same spectrum.

A “full flexibility” regulatory scheme does not establish the technical compatibility standards needed to encourage the development of new equipment and applications and the subsequent adoption of standards may become virtually impossible if numerous services can be offered over the same spectrum. Standardization creates economies of scale in the provision of subscriber equipment

⁸ It is at best unclear, for example, whether a terrestrial mobile system may be operated in a market adjacent to a satellite system. If adjacent licensees intend to operate conflicting services, the Commission may be called upon to determine (i) how interference issues will be resolved in such instances, and (ii) whether a licensee is entitled to a refund if the Commission subsequently determines that it cannot operate its proposed system because of adjacent operations. The Commission can avoid such problems by addressing these issues in the first instance here.

and infrastructure, as well as roaming. The absence of such standards inevitably leads to incompatible networks and equipment, interference service disruption, and public safety problems. If, however, the Commission were to adopt industry-created technical guidelines and assign WCS spectrum for a limited number of flexible uses, compatible networks could be designed and interference and public safety problems resolved. Manufacturers would be able to develop equipment based on the technical guidelines and primary use requirements. Thus, limited service flexibility, coupled with general technical guidelines, would spur the development of new equipment and deployment of new services.

The uncertainties created by service flexibility also will drive down auction values, particularly since bidders are unlikely to know, in advance of the auctions, what services will be deployed in adjacent markets or on adjacent channels. A potential bidder desiring to construct a DARS system will reduce its valuation of the spectrum (or simply avoid bidding altogether) because it is unclear how interference issues will be resolved and whether DARS systems can operate in the vicinity of terrestrial mobile systems. Similarly, a potential WCS bidder intending to construct a terrestrial system will reduce its spectrum valuation because of (i) interference concerns, (ii) equipment availability issues, and (iii) high frequency coordination costs.

II. THE COMMISSION SHOULD ADOPT A REGULATORY SCHEME THAT COMPLIES WITH SECTION 309(j) AND PERMITS WCS LICENSEES TO COMPETE WITH EXISTING SERVICES ON A LEVEL PLAYING FIELD

WCS licenses must be awarded pursuant to the Commission's competitive bidding authority which requires the FCC to (i) promote deployment in rural areas and (ii) disseminate licenses among a wide variety of applicants.⁹ The Commission also must ensure that its WCS licensing scheme

⁹ 47 U.S.C. § 309(j)(3)(A), (B).

takes into account public safety needs.¹⁰ The best way to achieve these objectives is to adopt regional service areas, issue licenses in blocks small enough to accommodate a variety of providers, and set aside one or two licenses in each market for the provision of public safety services.

Moreover, the Commission should ensure that the WCS licensing rules do not undermine regulatory parity. In this regard, the proposed rules would permit WCS licensees to offer CMRS.¹¹ Accordingly, for the WCS blocks allocated for CMRS use, the Commission should create service areas and build-out rules that mirror those applied to the CMRS industry.

A. WCS LICENSES SHOULD BE AWARDED ON AN MTA BASIS

Nationwide WCS licensing undermines the objectives of Section 309(j) because it would inevitably delay service to rural areas and would limit the number of potential bidders and ultimate licensees. A nationwide licensee will concentrate efforts on serving attractive metropolitan areas and will target larger metropolitan areas first. Thus, it may take years for a nationwide licensee to serve “secondary” metropolitan areas. This service delay is exacerbated with regard to rural areas which may never be served by a nationwide licensee. Under an MTA licensing approach, metropolitan areas such as Toledo, Ohio will be “prime” metropolitan areas initially targeted for service because MTA licensees each will have only a limited number of metropolitan areas to serve.

¹⁰ Appropriations Act, § 3001(b).

¹¹ AirTouch notes, however, the Commission’s finding in the General Wireless Communications Service (“GWCS”) proceeding that “the recent allocation of 120 megahertz of spectrum at 2 GHz for general mobile services in the form of broadband PCS is sufficient to satisfy the needs of general mobile service providers in this frequency range.” *Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, ET Docket No. 94-32, *First Report and Order and Second Notice of Proposed Rule Making*, 10 F.C.C.R. 4769, 4781 (1995) (“*GWCS First Report*”). Nothing to date demonstrates that additional 2 GHz spectrum is needed for the provision of CMRS. In fact, more than 205 MHz of spectrum has already been allocated for the provision of CMRS. *See Implementation of Sections 3(n) and 332 of the Communications Act*, GN Docket No. 93-252, *Third Report and Order*, 9 F.C.C.R. 7988, 8108 (1994).

MTA licensees also will be able to turn their attention to rural areas more quickly because of the limited number of metropolitan areas.

Nationwide WCS licensing also prevents the dissemination of licenses among a wide variety of applicants. Most entities have regional needs and lack the resources to acquire and construct a nationwide network. Entities desiring to acquire WCS spectrum as complementary to existing networks or for new niche applications will not bid for nationwide licenses. Similarly, a company with an innovative idea and willing to acquire a small WCS license to test the viability of the idea, will not acquire a nationwide license. Instead, only a select few will be given the opportunity to acquire a nationwide presence.

A nationwide licensing allocation would further have a detrimental economic effect on the emerging CMRS industry. Broadband CMRS licensees are able to acquire a "nationwide" presence only through aggregation. Cellular licensees must aggregate MSAs and RSAs; PCS licensees must aggregate MTAs and/or BTAs. It would undermine regulatory parity to require certain providers of two-way voice communications to compete on a regional basis against a nationwide WCS licensee providing the same type of service. Nationwide licenses would have enormous marketing, operational, and other scale advantages. The result would be diminished competition within local markets over time.

Based on previous experience, the Commission should award WCS licenses on an MTA or Economic Area ("EA") basis. The Commission evaluated various license areas when it reallocated 120 MHz of spectrum for broadband PCS and adopted a combination of BTAs and MTAs.¹²

¹² See *Amendment of the Commission's Rules to Establish New Personal Communications Services*, GN Docket No. 90-314, *Second Report and Order*, 8 F.C.C.R. 7700, 7732 (1993) ("PCS Second Report").

According to the Commission, these boundaries were “based on the natural flow of commerce” and “drawn on a county-line basis because most statistics relevant to marketing are published in terms of whole counties.”¹³ The Commission expressly rejected nationwide licensing because it would limit the variety of services and providers.¹⁴

In creating GWCS, the Commission also proposed to award licenses on an MTA basis.¹⁵ The Commission opted, however, to award GWCS licenses based on EAs.¹⁶ According to the Commission, EAs “appear[] to be more consistent with the likely uses of GWCS licensees than the use of MTAs and will increase opportunities for small businesses and other designated entities to obtain GWCS licenses.”¹⁷ Given that the current WCS proposal is modeled after GWCS, the use of EAs would be appropriate. AirTouch supports the use of MTAs, however, because the

¹³ See *PCS Second Report*, 8 F.C.C.R. at 7732. Moreover, the boundaries were determined “after an intensive study of such factors as physiography, population distribution, newspaper circulation, economic activities, highway facilities, railroad service, suburban transportation, and field reports of experienced analysts.” *Id.*

¹⁴ See *Id.* If a nationwide license were desired, however, an entity was still free to aggregate MTA/BTA licenses to form a nationwide system. Although the Commission decided to award a limited number of Narrowband PCS licenses on a nationwide basis, it awarded a substantial number of regional, MTA, and BTA licenses. The Narrowband PCS regulations are not an appropriate model for this spectrum, however, because Narrowband PCS regulations were expressly fashioned to mirror existing one-way paging systems.

¹⁵ *GWCS First Report*, 10 F.C.C.R. at 4807; *Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, ET Docket No. 94-32, *Second Report and Order*, 11 F.C.C.R. 624, 646 (1995) (“*GWCS Second Report*”).

¹⁶ *GWCS Second Report*, 11 F.C.C.R. at 648.

¹⁷ *Id.*

Commission has indicated that it will not entertain proposals that require licensing more than 306 WCS licenses.¹⁸

B. WCS LICENSES SHOULD BE AWARDED IN 5 MHz BLOCKS

Consistent with the GWCS example, WCS also should be licensed in 5 MHz blocks.¹⁹ The FCC found in the GWCS proceeding that issuance of 5 MHz licenses, coupled with a liberal aggregation policy, was sufficient to accommodate the various interactive, video, voice, and data services proposed for the spectrum.²⁰ A similar spectrum allocation, coupled with technical standards,²¹ should be adopted here.

The issuance of 5 MHz WCS licenses, coupled with a liberal aggregation/disaggregation and partitioning policy, would ensure that the spectrum is being put to its most efficient use. A licensee needing only 5 MHz of spectrum can acquire the amount of spectrum desired; a licensee needing 20 MHz can acquire the desired amount of spectrum by aggregating four blocks.²² The use of larger spectrum blocks, conversely, would require some bidders to acquire more spectrum than they actually need. A 5 MHz licensing scheme also would permit the FCC to address public safety

¹⁸ *NPRM* at ¶ 13 & n.27.

¹⁹ *GWCS Second Report*, 11 F.C.C.R. at 645.

²⁰ *GWCS First Report*, 10 F.C.C.R. at 4806.

²¹ AirTouch urges the Commission to adopt standards to facilitate the development of WCS equipment and minimize interference problems. The lack of standards for GWCS has delayed the development of equipment for use on that band.

²² AirTouch has consistently supported liberal aggregation/disaggregation and partitioning policies and urges the Commission to permit WCS licensees to aggregate, disaggregate, and partition without restriction.

communications requirements, as mandated by Congress.²³ Specifically, the services offered on one or two of the licenses should be limited to public safety services and could be used as dedicated data or video channels by law enforcement and other public safety agencies. Under such an approach, at least 20 MHz would remain for non-public safety uses.

C. THE COMMISSION SHOULD IMPOSE BUILD-OUT REQUIREMENTS

Parity also requires that all CMRS providers be subject to similar build-out requirements. It would be patently unfair to require recent PCS auction winners to struggle to meet firm build-out requirements and permit WCS licensees to construct only where economically desirable.²⁴ Absent a build-out requirement, an entity could acquire numerous licenses (or a nationwide license) and only construct a system in a major metropolitan area. Once this initial system generated enough revenue, it could then construct another system. Service to rural areas may never occur under this scenario.

Moreover, the Commission's proposal not to subject WCS licensees to build-out requirements violates the Communications Act. Congress mandated that WCS licenses be awarded pursuant to competitive bidding. The FCC's competitive bidding authority is contained in Section 309(j) of the Communications Act which expressly states

the Commission shall . . . include performance requirements [in its regulations], such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas, to prevent stockpiling or

²³ Appropriations Act, § 3001(b).

²⁴ Broadband PCS licensees, as well as GWCS licensees, must provide service to one-third of the license area population within five years of licensing, and to two-thirds within ten years. See 47 C.F.R. §§ 24.203(a), 26.104(a); see also *GWCS Second Report*, 11 F.C.C.R. at 669-70; *Implementation of Section 309(j) of the Communications Act — Competitive Bidding*, PP Docket No. 93-253, *Fifth Report and Order*, 9 F.C.C.R. 5532, 5570 (1994).

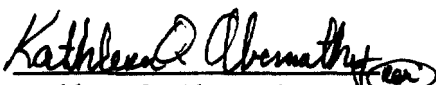
warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services.²⁵

Accordingly, consistent with Section 309(j) and regulatory parity, WCS licensees must be subject to the same build-out requirements imposed on other CMRS licensees if they are permitted to offer CMRS services.

CONCLUSION

For the aforementioned reasons, the Commission should adopt WCS regulations that are consistent with an effective spectrum allocation policy. Moreover, the Commission should issue 5 MHz WCS licenses on an MTA basis. Finally, pursuant to Section 309(j) of the Communications Act and regulatory parity principles, the Commission should adopt build-out requirements and reject nationwide licensing.

Respectfully submitted,
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²⁵ 47 U.S.C. § 309(j)(4)(B).

CERTIFICATE OF SERVICE

I, Donna McClain, do hereby certify that I have, on this 4th day of December, 1996, served via hand delivery a copy of the foregoing AirTouch Comments in GN Docket No. 96-228 upon the following:

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